

## REMARKS

These remarks are responsive to the Office Action dated April 17, 2003, in which each of the pending Claims 1-19 were rejected under 35 U.S.C. §103(a) as being unpatentable over United States patent number 5,694,388 issued to Sawahashi et al. (hereinafter referred to simply as "Sawahashi") in view of United States patent number 5,724,378 issued to Miki et al. (hereinafter referred to simply as "Miki").

The Manual of Patent Examining Procedure (MPEP) states as follows:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. (See MPEP §2143, underlining added for emphasis).

As recited in claim 1, the receiver "obtain[s] channel estimation values by calculating a weighted sum of average values of pilot symbols", and "compensate[es] for channel fluctuations of [a] data symbol sequence using the channel estimation values." Also, the receiver "controls the weighting [for obtaining the channel estimation values] in response to a rate of the channel fluctuations."

The Office Action frankly and rightfully acknowledges that "Sawahashi et al. does not disclose means for controlling the weighting in response to a rate of the channel fluctuations." However, the Office Action also states that Miki does disclose this feature. In particular, the Office Action states that "Miki et al. discloses a receiver for receiving and demodulating a signal comprising of a channel estimators which obtain channel estimations based on pilot symbols. (Fig. 3B, block 16, column 7, lines 22-32). Also, the Office Action states that "the factor used to control the weighting of the received pilot symbols can be the SIR of the paths, received signal levels of the paths, or estimated values of the amplitude fluctuations of due to fading (column 7, lines 53-63). Furthermore, the Office Action states that "[t]hese factors all pertain to a rate of the path (channel) fluctuation due to interference or fading."

However, what is described in column 7, lines 53-63 of Miki et al. is the weighting performed at the RAKE combiner 18, not any weighting performed at the channel estimator 16.

Since the signal obtained by the weighting combining at the RAKE combiner 18 is not a channel estimation value, the description regarding the weighting at the RAKE combiner 18 in Miki does not relate to the recited features of claim 1 that "weighting for obtaining channel estimation values is controlled in response to a rate of channel fluctuations". Furthermore, Miki does not describe that the weighting at the channel estimator 16 is controlled in response to a rate of channel fluctuations. Therefore, Miki also does not describe or suggest the recited feature of Claim 1 that the weighting for obtaining channel estimation values "is controlled in response to a rate of channel fluctuations".

Since Sawahashi and Miki, even if combined, do not describe all of the features claim 1, claim 1 is not unpatentable over Sawahashi in view of Miki. Since the combination is insufficient to support the *prima facie* case for obviousness, it is not necessary at this time to present arguments as to why the combination of Sawahashi and Miki may be inappropriate.

The other independent claims 8 and 16-19 recited similar features as are attributed to claim 1 above. Accordingly, claims 8 and 16-19 are likewise not unpatentable over Sawahashi in view of Miki. The other pending claims depend, directly or indirectly, from one of independent claims 1 or 8 and thus are not unpatentable over Sawahashi in view of Miki for at least the reasons that their corresponding independent claim 1 or 8 is not unpatentable over Sawahashi in view of Miki. Accordingly, withdrawal of the 35 U.S.C. §103(a) rejection is respectfully requested.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 14<sup>th</sup> day of July, 2003.

Respectfully submitted,



ADRIAN J. LEE  
Registration No. 42,785  
Attorney for Applicant



**022913**

PATENT TRADEMARK OFFICE

AJL:ds  
W:\15689\51\DS0000000978V001.DOC